Response to Request for Information for Waterbury State Office Complex



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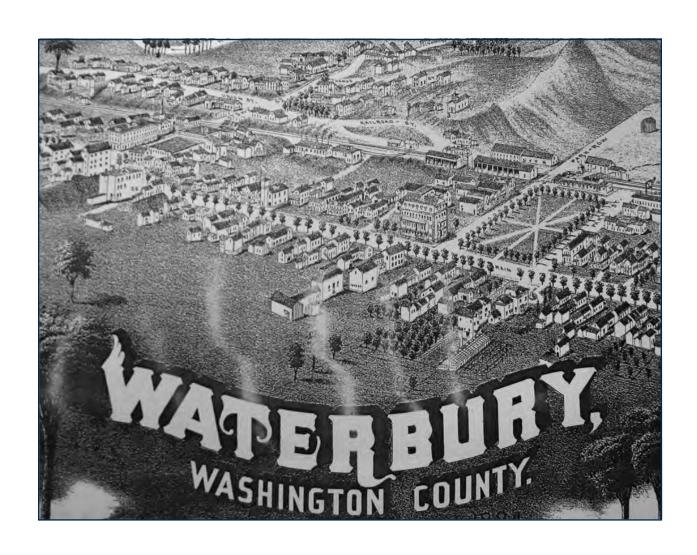


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INTRODUCTION

The holistic reconsideration and adaptation of the WSOC is a rare opportunity in the life of any set of buildings. A catastrophic natural event has caused the complex to be vacated, and the chance is here now to explore and implement concepts that will carry the complex and the town of Waterbury forward into the end of this century. Any set of solutions should have the flexibility to maintain utility and value to Vermont for at least the next fifty years.

This response begins by considering on a global scale the size of the complex, its local and regional contributions, its current assets and the continual investment made by Vermonters over the years. It concludes by offering preliminary direction speaking to potential uses and configurations that can offer exciting and durable revitalization. To this end the response includes a discussion (see Appendix D) that is divided into the following three sections:

- I. Why is the complex worth saving?
- II. What are the key problems?
- III. What kinds of solutions might be embraced?



B. EXPERIENCE

A. PROFILE

1. Company Information

The Rood & Sellers team is a collaboration of six professional design, planning, engineering and construction offices. The lead design team includes the following two firms:

Bast and Rood Architects Contact: L. Macrae Rood, Partner

P.O. Box 220 Tel: (802)482-2804

Hinesburg, VT 05461 Email: rood@madriver.com

Sellers and Company Architects Contact: David E. Sellers, Owner

P.O. Box 288 Tel: (802)496-2787

Warren, VT 05674 Email: dave@sellersandcompany.com

2. Years of Practice

Bast and Rood Architects: 16

Sellers and Company Architects: 41

3. Partnership Organization

In addition to the two lead design team members, four additional offices are poised to provide comprehensive supplementary services:

Engineering Ventures, Inc.Contact: David Boehm, CEO

208 Flynn Ave., Suite 2A Tel: (802) 863-6225

Burlington, VT 05401 Email: davidb@engineeringventures.com

PC Construction Co. Contact: Jon Pizzagalli, Project Manager

193 Tilley Dr. Tel: (802) 658-4100

South Burlington, VT 05403 Email: jonpizzagalli@pcconstruction.com

Calthorpe Associates Contact: Peter Calthorpe, Principal/ Owner

2095 Rose St., Suite 201 Tel: (510) 548-6800

Berkeley, CA 94709 Email: peter@calthorpe.com

William McDonough + Partners Contact: William McDonough, Partner

700 East Jefferson St. Tel: (434) 979-1111

Charlottesville, VA 22902 Email: william@mcdonough.com

Any proposal for the WSOC will require seamless integration of several professional fields from start to finish. The four consulting firms above represent some of the most reputable and capable firms in practice today. Services to be provided by each include the following:

Engineering Ventures: Structural and site engineering Calthorpe Associates: Community and site planning

William McDonough Architects: Sustainable and energy-efficient building design PC Construction: Cost estimating and building systems consulting

Within this partnership, the lead design team will interface with and coordinate the work of the consulting firms. [Please note that consultants above are to act in a consulting role only and may be freely engaged by other responders or the State at any time during or following the selection process.]

4. <u>Implementation Experience</u>

Rob Bast and Mac Rood have extensive experience in leadership roles in municipal government, and useful networks in Vermont. They have succeeded in difficult projects which required considerable public input, often in situations where others were ineffective. They led the process and developed the design for the City Market in Burlington, for the municipal sewer system in Warren, for the recent Williamstown Middle High School and, this year, for the renovations to the Craftsbury Academy.

Dave Sellers has a unique ability to motivate interest in far reaching projects. He has developed visionary architectural projects across the country, including working with Patch Adams, M.D. to create the Gesundheit Institute for Health. Dave has been involved in business start ups, including Northern Power and the Mad River Rocket Co, whose prime products he invented.

Mac, Rob and Dave have been teachers; Mac and Rob at Yestermorrow School, and Dave at both Yestermorrow and Yale University.

The members of this group have interacted with each other on various projects over periods as long as 40 years. We have a track record of executing projects that are more than architectural: they work to stimulate and add vitality to the communities they share. To our core organizational team we have added colleagues with international credentials in sustainability and community planning, as well as highly qualified engineers and estimators with extensive local and regional experience.

C. STATE RESPONSIBILITY

In order to provide an accurate and thorough proposal it will be useful, or perhaps necessary, to access the following information:

- 1. Current Boundary Survey
- 2. Revised flood maps (when available)
- 3. Flood mitigation and recovery studies since 1927.
- 4. Program analysis for the State Mental Hospital including future expansion and scope.
- 5. A detailed program outlining the requirements and goals for all State departments that were housed in the WSOC. This will be essential for determining the appropriateness of the WSOC for each department, moving forward, and/or for redesigning and renovating buildings to work well for these departments



D. APPENDIX

I. Waterbury State Office Complex: Worth Saving?

A Central Location with Unequaled Space

Mid-way between Montpelier and Burlington, Waterbury is close to being the population center of Vermont. The state office complex, at 700,000 square feet, is also the largest campus of office space in Central Vermont. It has no equal in this regard. It is near to Montpelier for conducting state business or when interactions with the legislative or executive branches are needed.

Many of the state offices can easily return to the State complex. However, we are proposing a future for the State property to be composed of an array of education, sports training, business modeling and incubator spaces and the ARTS.

A Transportation Crossroads

Waterbury is served by two east-west highways, I-89 and Rt.2, as well as a major north- south highway, Rt. 100. It is also served by the major railroad route through the state. The train could become increasingly important in a world challenged by higher fuel prices. One can envision the possible use of trains to transport workers from Orange County,



Washington County and Chittenden County. Communities up and down these corridors benefit from this proximity. Waterbury's location facilitates group travel and will continue to be an important public transportation stop.

Established Town Support Services

Any enterprise, whether it is the State and its employees or a private company or an educational or non profit institution, benefits from a vibrant local service infrastructure. Waterbury has developed shopping, banking, restaurants and lodging geared to the needs and scale of its working population. The Village of Waterbury has also developed municipal services in fire and police, water and sewer.

Replicating these services in different locations would clearly be difficult and take time.

A Major Investment of the People of Vermont

The state office complex has been an enterprise of the State of Vermont since the 19th century. The complex may be said to have the embodied energy of more than a century of work, and had been maintained and used for all of that time. A substantial effort has gone into protecting this investment since the onslaught of Irene. That work has cleaned the buildings, dried them, made sure that their potential for future use is intact and protected. We are very impressed by the effort of BGS in this regard. There are distinct assets of the location which deserve mention and attention:

- -A district heating plant. A district plant with a multi fuel capability is a highly economical way to provide heat for a large set of buildings. The infrastructure leading from the plant to the buildings is a major investment and asset of the location as well.
- -Structurally sound buildings. The buildings are primarily masonry construction and have survived the flooding well. Removal of non structural wood, wall board, and insulation from the flooded areas has not compromised the buildings as a whole.
- Clean buildings. The buildings are at this point clean and dry. They are waiting for an orderly plan of action to be put in place which will allow the renovation for new roles to take place
- -Empty buildings, a golden opportunity to reorganize. To have the empty space ready and available to work without interruption on a renovation plan is a huge asset. As the state has seen in this fall's road reconstruction projects, there is a major advantage to being able to "close the road" and work without interruption. Much time is saved, and therefore, money. Waterbury provides that opportunity at this moment.

II. Problems to be Solved

Flooding

The power building, constructed in 1925, provides considerable instruction on the progress of flood control efforts in central Vermont since the 1927 flood. That flood's high water mark is noted with a small bronze plaque near the top of the central entry door's recessed facade, at about 18 ft of elevation. The recent flood, also of remarkable intensity, achieved a height of only about 7 ft. at the same location (see picture). Flood control dams at Wrightsville, East Barre and Marshfield as well as



the retention capabilities of the greater mass of present day forest may well have made a considerable difference. But not enough. A strategy that protects the complex from at least the level of flooding experienced this year is a necessary first step in any grand plan. No sensible investor would, or should, invest in the complex without flood protection. Users of the site as well need to be confident that an investment in the site will be protected. Once that confidence is established, the opportunities can come into clearer focus

Adjusting to the Southwest Approach

Over the years, the approach to the site on the inner horseshoe has diminished in utility and been superseded by the larger horseshoe which goes around the back of the complex. The evolution of the building complex has not been complemented by reorientation of the front of the buildings. This sense of coming in the back door can and should be corrected. The current approach has a negative impact on visitors and employees alike. The redeployment of buildings and interstitial spaces will enhance the workplace and improve the efficiency and organization of any departments which might operate in the complex.

Buildings crowded on site over time with Uncoordinated Planning

The original 1890 site plan was clear and well organized. Buildings added through 1924 (10 South, 10 North, Weeks) were sensitive to the original site plan and generally complemented the campus. Buildings added from the 30's through the 50's ("A", "B", Dale, Osgood) began to compromise the clarity of the original plan.

The 1962 addition of the Center Core, while surely functional, destroyed any remaining organizational clarity of the southwest side of the campus. Currently, entering the complex from this



side is disorienting and unpleasant for employees and the public.

Over the years, the incremental insertion of buildings into the site destroyed the organization that characterized the earlier iterations of the Vermont State Hospital. Buildings were crowded with little consideration for the creation of attractive outdoor spaces to complement the historic front lawn. We have a unique opportunity to bring a plan back to WSOC, one that recognizes both the historic street entrances and the more recent southwesterly orientation. In so doing, we can build on the strong points of the existing complex and foster a better workplace.

Compromised Interiors

The confused arrangement of the building exteriors and approaches only get worse on the inside. The haphazard incremental construction of partitions has created a maze that makes it difficult for anyone to understand how to navigate the buildings. The compartmentalization of the building interiors that may have been necessary in a mental hospital is not conducive to interaction between workers or to a welcoming environment for the public. Although offices generally are well lit by windows, circulation spaces are poorly lit, if at all, having little access to exterior walls and natural light. In general the interior environment was poor even before the flood. A major renovation is necessary to make these buildings a place where people want to work.

III. Directions and Concepts

Flood Control

There are three approaches to minimizing the damage from future floods: 1) keep water away from the entire campus; 2) flood proof individual buildings; 3) raise occupied spaces above the flood level. These three strategies may be used alone, or in combination.

1. A Long Berm

We propose an earthen flood control berm or dike that would protect the Waterbury state office campus and the village of Waterbury. It would run from the high ground of the cemetery on Winooski St., between Randall Street and the corn field, easterly to the complex, around the complex to the south, but still up on the parking level, behind the power house and then between buildings and fields all the way to the Rt. 2 bridge (see exhibit 3 attached). The distance is about 5000 ft. The height of the berm would be set to exceed the high water level of the flood caused by Irene, or in excess of 8 ft.

We envision a vegetated slope with a flat top which would serve as a sort

of serpentine mound, with trees and grassy areas interspersed, thoughtfully landscaped to be easily maintained. Over time, it would become a graceful backdrop, with a walking and bike path along its top. An order of magnitude cost for the berm itself would be around \$8.8 million. (see exhibit 4 attached) The benefit to the entire area of this grand gesture would be enormous, and would enable the reuse of not only WSOC, but many adjacent properties.

2. Flood-proofing individual buildings

Individual buildings may be floodproofed using a variety of techniques such as those employed successfully by David Boehm and Engineering Ventures on Burnham Hall in Lincoln VT. Deployed on every building, this strategy would probably be more expensive than protecting the entire campus with a berm, but for particularly sensitive buildings, or in the event that the berm is not constructed, it should be retained as an option.

3. Raise occupied spaces above flood level.

Whenever possible, occupied spaces and sensitive equipment or assets should be raised above the flood level. Certainly new construction, or anything built outside the berm, should be above food level. There are opportunities in selected buildings for abandoning the ground level or converting them to less sensitive uses (parking, arcaded public spaces, etc.).

Acknowledging and improving the Southwest approach

In order for the public to have a positive experience with the renovated campus, it is key that the organization of the site be made more coherent and that it acknowledge that due to the size of the campus and volume of parking, most people will be approaching the campus from the southwest, or what has historically been considered the "back" of the site. This can be accomplished by establishing a hierarchy of gateways, open spaces, courtyards and groups of buildings that lead the public by visual cues to the correct location. The re-organization can be done without wholesale demolition of existing buildings, although some buildings may need to be removed.

Cleaning up the dysfunctional campus site plan

To correct the disorganization and crowding of the existing site plan we propose addressing the most problematic building, the "Center Core", built in 1962. This building almost completely fills the space that is surrounded by the Center Building, 10 North and 10 South. We propose removing the second floor of this building and turning the resulting space into an elevated courtyard connecting the surrounding buildings.



The deck of this courtyard (ceiling of the first floor) is a coffered concrete structure that has architectural merit (similar to Louis Kahn's Yale Art Gallery) and would be capable of supporting the courtyard loads. The courtyard would be visible from surrounding buildings and serve as a multilevel sculpture garden and green space. This southwest facing elevated courtyard would be connected to the existing main entrance and front lawn that will serve as a gateway to the center of the campus from the east.

The goal is to preserve and enhance the main green, entry and side greens, to protect and recognize the entire historic façade from towers to towers, and to create a similarly positive experience when approaching from the west.

Make the interior spaces state-of-the-art model work places

There is no reason that these buildings, especially the oldest ones, can't be made pleasant, inviting places to work and visit. Most of the buildings are slender (approximately 40 feet wide) which means that everyone can be within 20 feet of an exterior wall and natural light. Access to light and ventilation can be accomplished by removing partitions and opening the space up. Where necessary, especially towards the south, additional windows can be installed. The embodied energy in these buildings is a huge investment that should not be squandered, but the Irene flood has given us an opportunity to bring these buildings into the twenty-first century with a major energy upgrade. Natural light, super-insulation, heat recovery ventilation, non toxic materials and existing district heating are all features that can be incorporated into an environmental showcase collection of buildings. Environmentally sensitive, energy efficient adaptive re-use of historic buildings within an existing village incorporates all the key goals that we should be striving for.

Consider a Variety of Uses:

The question of ultimate use of this campus and these buildings should be considered separately from the strategies employed for preserving and enhancing the site. As mentioned at the beginning, it is imperative for many reasons that the campus be restored to its vital place in the fabric of the Village of Waterbury. Once restored, it will be attractive for many different uses, including use as State offices.

Each State agency should put together a program itemizing needs and goals. The proposed rehabilitated campus can be evaluated based on its ability to satisfy the programmatic needs of each agency. It is possible, or even likely, that most original tenants of the campus will want to return to Waterbury, but should that not be the case and alternate users be required, we propose various potential tenants:

1. <u>University of Vermont, Waterbury</u>. An expanded version of the educational facilities that existed before the flood would be a great contribution to Waterbury.

- 2. <u>Incubator space for entrepreneurs.</u> The concentration of infrastructure and facilities would make the WSOC a great place to host and nurture start-up businesses along the lines of the incubator space developed by Robin Morris in the Mad River Valley.
- 3. <u>Visual Arts Center</u>. The campus could easily accommodate a collection of workshops and studios for creative arts, including foundries, print shops, large studios etc. The center building and round towers are ideal for gallery and exhibition space if opened up fully.
- 4. <u>Sports Center</u>. Waterbury is also at the recreation and sports crossroads of Vermont. A training center and sports college promoting skiing, XC, hockey and ski jumping would be a boost to the local economy.

Finally, we believe that it would be appropriate to create an icon as a visual signature for the Waterbury campus, to anchor the project visually and signal its resurrection. (Think Eifel Tower in Paris, or the Ferris Wheel at the Chicago Columbian Exposition.)

In that vein we propose THE SKI JUMP. There is only one Olympic training center for jumping in the East: Lake Placid. A Waterbury ski jump would give Vermont a leg up on possible future Olympics. The jump center will then have direct traffic access from the interstate and will have a wonderful pedestrian walkway from the train station along PARK ROW. We will include that walkway as part of the plan. Also under consideration are a sculpture plaza, garden, ice sculpture park etc. that connects the downtown to the jump center, the train station and the multiple campus activities all at once.

Conclusion

The Team presenting this proposal has the skill and business connections to propose specific building plans for the four uses outlined, as well as integrating any of those uses with any level of re-occupancy by the state agencies who previously worked in Waterbury.

- 1. Olympic Athletes and event organizers for a JUMP CENTER for a deep analysis of required area, training centers, dormitory spaces and facility maintenance and security.
- 1. Incubator business park with dormitory spaces, classrooms and offices. We suggest linking with a graduate school of business and connect with the Univ. of Vt. Programs.
- 1. Art Center in the historic façade of the main buildings. We recommend the location of the State Art galleries (there is none presently) and archive offices as

a part of the two towers on the left side of the façade facing Main Street.

1. The center of the façade and the towers on the right will comprise the new Art Education program as a new UVMW (University of Vermont – Waterbury). The upper floor spaces are perfect for dormitory and studio work. The assorted buildings in the rear can easily become foundries, steel and wood shops. The Studio Center in Johnson and UVM can easily participate in the organization of this facility. There is no Art Facility in the USA that matches the opportunities for studio spaces.

The goal of any project at the State of Vermont's Waterbury State Office Complex should be to protect the existing investment of the people, to create a great working environment, and to make the investment needed to realize a vision durable over the long term. The leadership and commitment being shown by the State now will develop a sustainable legacy for generations to come.

IV. Figures

Exhibit #1 – Programatic Use Designation Plans 1-4

Exhibit #2 – Overall Masterplan

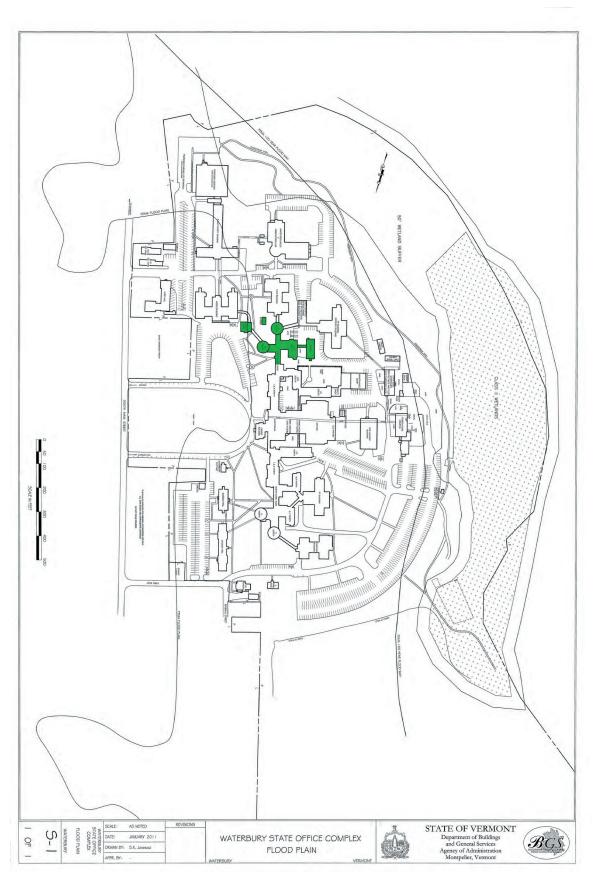
Exhibit #3 – Flood Berm Plan

Exhibit #4 – Flood Berm Estimate

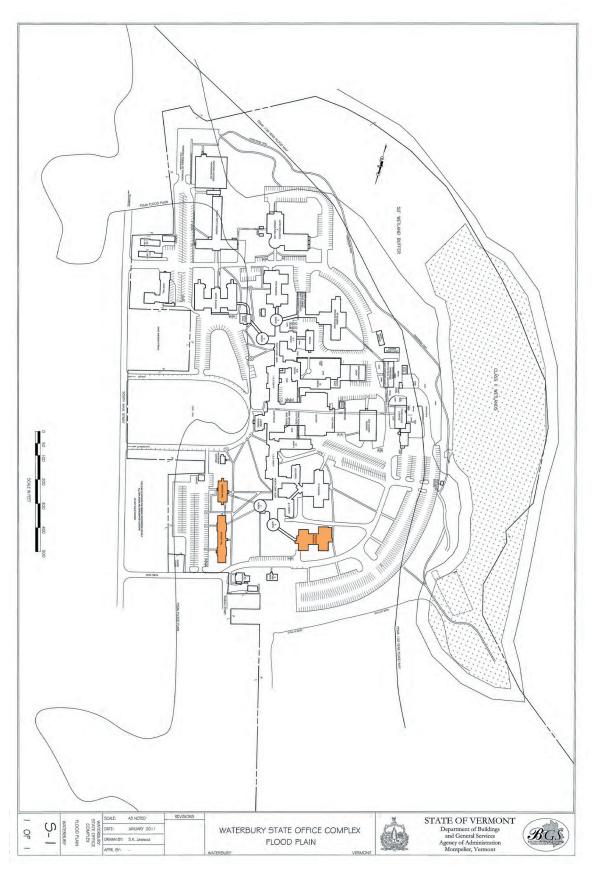
Exhibit #5 – Typical Building Plan

Exhibit #6 – Engineering Ventures Statement

Exhibit #1 - Programatic Use Designation Plans 1-4







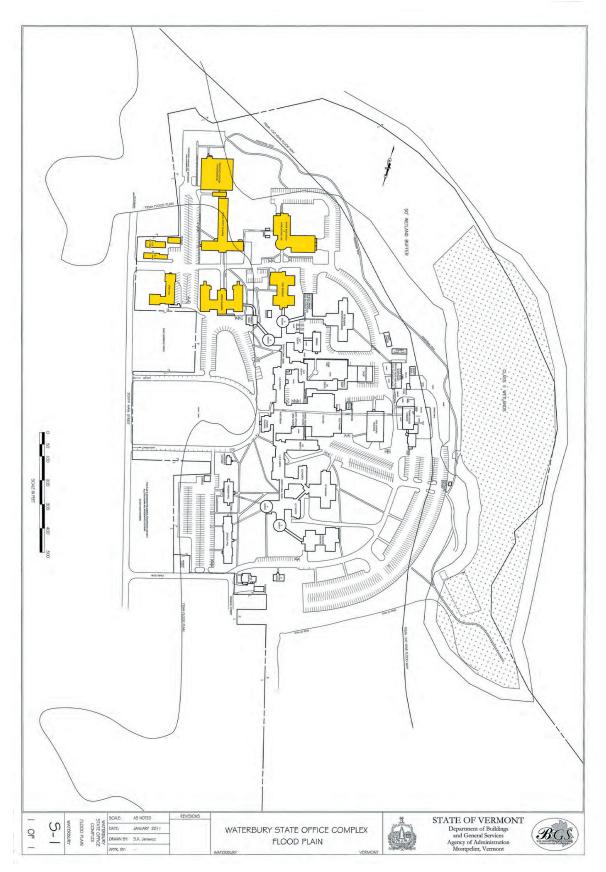


Exhibit #2 - Overall Masterplan

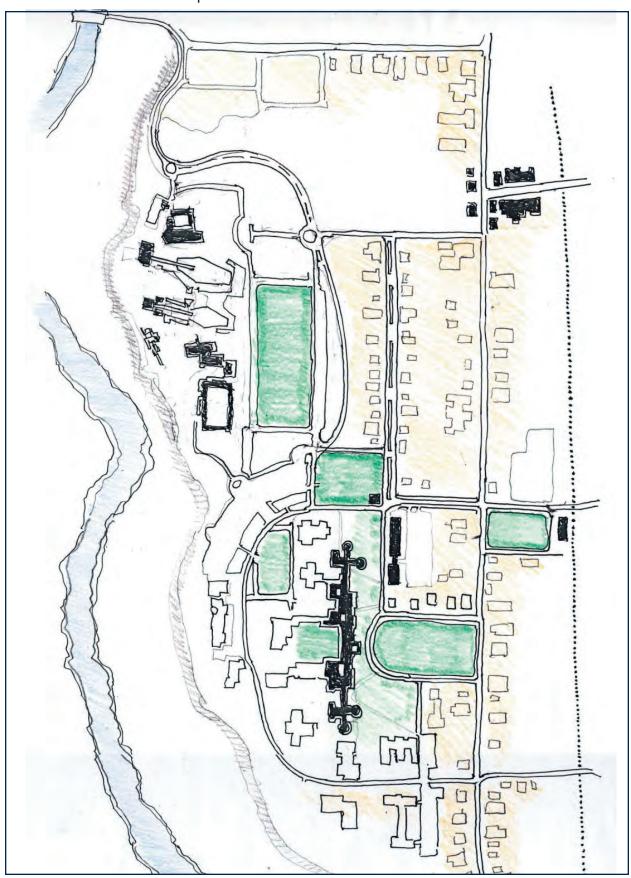
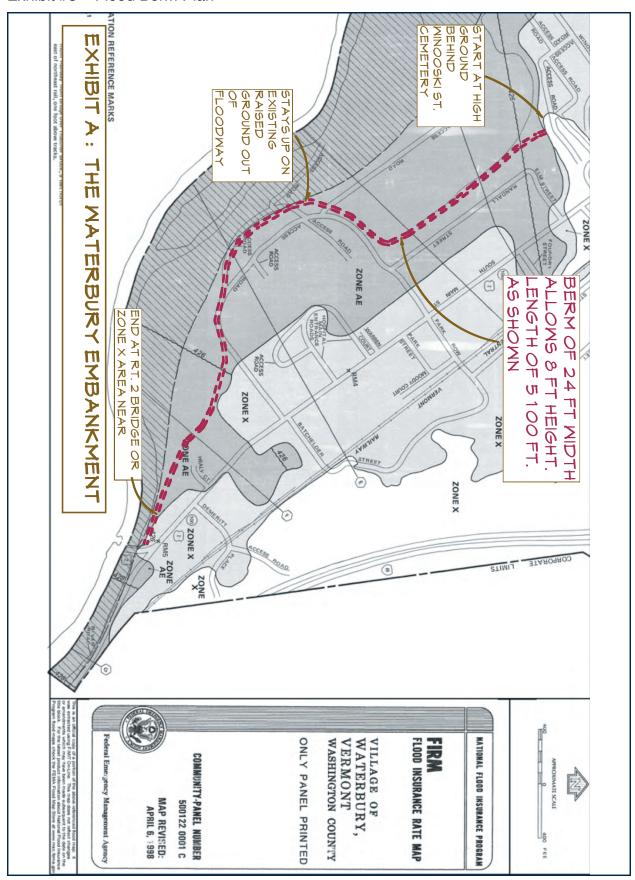
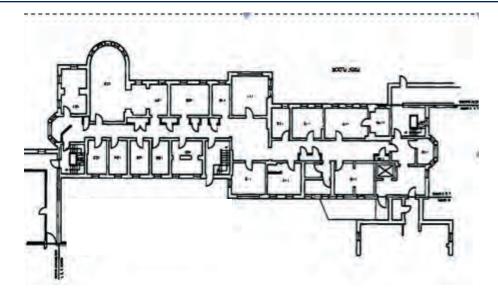


Exhibit #3 - Flood Berm Plan

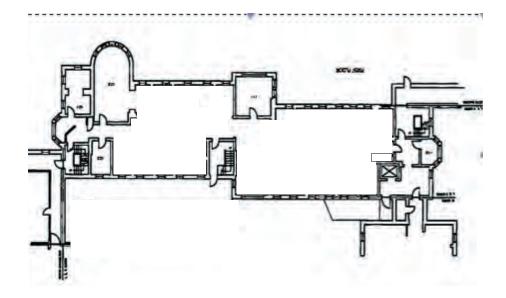


WATERBURY FLOOD BERM Preliminary Cost Analysis	
Work Description	Amount (\$)
Site prep with tree & shrub removal	50,000
Strip topsoil & pile, load, haul, dispose	235,000
Access, mats, erosion control	125,000
Sub-Total	410,000
Drainage through berm from upstream	150,000
Berm construction	2,400,000
Access road along berm	600,000
Sub-Total	3,150,000
Topsoil, grade, seed, fertilizer, mats	1,000,000
Planting	500,000
Repair existing conditions	500,000
Sub-Total	2,000,000
Storage and pumping from the inside	750,000
Design and permitting costs	1,000,000
Sub-Total	1,750,000
Category Totals	7,310,000
± 20% contingency	1,500,000
TOTAL Berm Cost	8,810,000

Exhibit #5 - Typical Building Plan



Existing typical floor plan is compartmentalized, limiting access to natural light and ventilation. People have little contact with each other and little ability to orient themselves with respect to the overall facility or even their neighbors.



A renovated space could be opened up by the removal of most partitions. Selected offices could be kept for specific needs, and stairways could still be enclosed for fire protection. The overall effect would be greater access to light and air and views to the outside would eliminate the sensation of being "buried" in a vast facility.

Exhibit #5- Typical before and after floor plans

ENGINEERING VENTURES, PC

We provide structural and site engineering, permitting, and planning for a wide variety of projects through Vermont and beyond. We work in and are licensed in close to 25 states, and with our staff of 30, including14 licensed engineers, we work on multiple projects at one time and have experience in working on multiple projects on one site within a comprehensive plan for the site or campus.

We are particularly well known for developing creative solutions to unusual problems. We bring great experience, expertise, insight, and a willingness to use state of the art ideas, and we collaborate to push the limits in our engineering to find unique answers.

We have worked on numerous State of Vermont buildings over the years, including buildings at the Waterbury Complex, including recently the renovation of the Waterbury State Public Safety Building. We have also been working recently in Waterbury on the Green Mountain Coffee Roasters expansion.

We have substantial experience and strong reputation with historic buildings in the State. Last month we were called on, on short notice, to send 4 of our staff out to judge conditions at 20+ buildings for the Preservation Trust of Vermont in communities from Waterbury to Wilmington, as well as calls to other private and public clients, following the damage done by Hurricane Irene.

We have worked on many projects involving waterproofing, from full flood protection to buildings located in flood prone areas along waterfronts, and those with serious ground water conditions. Most recently we worked on the Burnham Hall project in Lincoln, VT. This historic building was retrofitted with flood protection measures such that during the recent hurricane, water was well up on this protection at the windows and doors of the lower level and the protection proved invaluable. As part of this project we were responsible for interior measures to resist the hydrostatic pressures created.

Examples of projects where we have worked on numerous buildings or sites on a single site or campus have included the VT Law School, the University of Vermont, a major development site in NH for office/retail/hotel/industry/and residential uses, the Goodyear industrial site in Windsor, Brattleboro Union High School (a six year phased renovation and new construction project), the Burlington Waterfront, Kimball Union School in NH, and many other institutional campus-like and public settings.

Our services for buildings may include initial planning and evaluation, full conditions and existing capacity analysis, structural design for retrofit, renovation, restoration, or new construction. For sites, our work may include planning and master planning, permitting assistance for local, state and federal permits, site evaluations on the surface and below ground, and design for earthwork and grading, utilities, vehicular and pedestrian circulation including roads/parking/walkways, and stormwater management.